

COPY OF ALL CLAIMS

1. (amended) A crosslinked, water-soluble or water-dispersible polyurethane of
- A) at least one water-soluble or water-dispersible polyurethane prepolymer containing terminal isocyanate groups of
- a) at least one compound having a molecular weight in the range from 56 to 300 which contains two active hydrogen atoms per molecule,
 - b) at least one polymer containing two active hydrogen atoms per molecule,
 - c) at least one compound which contains two active hydrogens and at least one ionogenic or ionic group per molecule,
 - d) at least one diisocyanate,
- B) at least one polymer containing groups which are reactive towards isocyanate groups, chosen from hydroxyl, and primary and secondary amino and/or carboxyl groups,
- or a salt thereof,
- where the polymer B) comprises, in copolymerized form,
- e) at least one α,β -ethylenically unsaturated monomer which additionally contains at least one group which is reactive toward isocyanate groups per molecule,
 - f) optionally at least one α,β -ethylenically unsaturated monomer which is chosen from esters of α,β -ethylenically unsaturated mono- and/or dicarboxylic acids with C_1 - C_{22} -alkanols, amides of α,β -ethylenically

unsaturated mono- and/or dicarboxylic acids with mono- and di-C₁- to C₂₂-alkylamines, esters of vinyl alcohol and allyl alcohol with C₁- to C₄₀-monocarboxylic acids, vinyl ethers, aromatic vinyl compounds, vinyl halides, vinylidene halides, C₂- to C₈-monoolefins, nonaromatic hydrocarbons having at least 2 conjugated double bonds and mixtures thereof,

- g) optionally at least one α,β -ethylenically unsaturated monomer which is chosen from N-vinylamides, N-vinyl lactams, primary amides of α,β -ethylenically unsaturated monocarboxylic acids, vinyl- and allyl-substituted heteroaromatic compounds and mixtures thereof,
- h) optionally at least one further monomer containing a free-radically polymerizable, α,β -ethylenically unsaturated double bond and at least one ionogenic group per molecule.

2. A polyurethane as claimed in claim 1, where the ratio of NCO equivalent of the compounds of component d) to equivalent of active hydrogen atom of components a), b) and c) is in a range from 1.01:1 to 1.4:1.

3. (canceled)

4. (amended) A polyurethane as claimed in claim 1, where the polymer B) comprises, in copolymerized form,

- from 0.05 to 15% by weight of at least one component e),
- from 0 to 99.9% by weight of at least one component f),

B

- from 0 to 99.9% by weight of at least one component g), and
- from 0 to 50% by weight of at least one component h)

the total amount of components f) and g) being in a range from 30 to 99.9% by weight.

5. (amended) A polyurethane as claimed in claim 1, where the component e) is an ester of acrylic acid or methacrylic acid with a C₂- to C₁₂-aminoalcohol, where the amine nitrogen may additionally carry a C₁- to C₈-alkyl radical.

6. A polyurethane as claimed in claim 1, where the ratio of NCO equivalent of the component A) to equivalent of active hydrogen atom of component B) is in a range from 20:1 to 1:1.

7. A polyurethane as claimed in claim 5 which comprises, in copolymerized form

- from 0.05 to 15% by weight of a component e),
- from 0 to 99.9% by weight of at least one component f),
- from 0.1 to 99.9% by weight of at least one component g),
- from 0 to 50% by weight of at least one component h)

where the total amount of components f) and g) is in a range from 30 to 99.9% by weight.

12. A coating composition for the textile, paper, printing, leather and adhesives industries, which comprises at least one polyurethane as claimed in claim 1.

13. A polyurethane as claimed in claim 7 which comprises, in copolymerized form, from 0.05 to 15% by weight of tert-butylaminoethyl acrylate and/or tert-

B

KIM et al., Serial No. 09/840,799

butylaminoethyl methacrylate as component e).

B